

## REMARKS

Upon entry of the present Amendment, claims 1-4, 6-15, 17-23 and 29-32 will be pending in the Application.

Claim 30 is added to specify that the catalyst (a3) consists essentially of one or more organobismuth catalysts. Claims 31 and 32 specify that the urea derivative is present in the rheological aid in an amount of more than 14% by weight, and is supported by Example 1 of the application, which discloses a rheological aid with more than 14% by weight of the urea derivative. No new matter has been introduced by the foregoing amendments.

Amendments to and cancellation of the claims, as set forth above, are made in order to streamline prosecution in this case by limiting examination and argument to certain claimed embodiments that presently are considered to be of immediate commercial significance. Amendment or cancellation of the claims is not in any manner intended to, and should not be construed to, waive Applicants' right in the future to seek such unamended or cancelled subject matter, or similar matter (whether in equivalent, broader, or narrower form) in the present application, and any continuation, divisional, continuation-in-part, RCE, or any other application claiming priority to or through the present application, nor in any manner to indicate an intention, expressed or implied, to surrender any equivalent to the claims as pending after such amendments or cancellations.

Reconsideration is respectfully requested in view of the foregoing amendments and/or following remarks.

1. **Rejection of claims 1-4, 6-15, 17-23, and 29 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of Rockrath, et al. (U.S. Patent No. 7,019,042) in view of Sciangola (U.S. Patent No. 5,064,871).**

Applicants respectfully traverse the nonstatutory obviousness-type double patenting rejection in view of the arguments below, which are hereby incorporated by reference. Withdrawal of this rejection is respectfully requested.

2. Rejection of claims 1-4, 6-15, 17-23, and 29 under 35 U.S.C. §103(a) as unpatentable over DE10042152 as translated by U.S. Patent No. 7,019,042 to Röckrath et al., hereafter "Rockrath", in view of U.S. Patent No. 5,064,871 to Sciangola, hereafter "Sciangola".

Applicants and the Undersigned greatly appreciate the detailed basis of rejection from the PTO. However, Applicants respectfully traverse the rejection with regard to the currently pending claims as well as new claims 30-32.

The basis of rejection is essentially that it would have been obvious to use the catalyst of Sciangola in Rockrath's reaction to make a thixotropic agent comprising urea crystals. To establish a prima facie case of obviousness, there must some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings with a reasonable expectation of success, and the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143.

The instant combination of references fails to satisfy this standard for several reasons.

- I. THERE IS NO MOTIVATION TO COMBINE THE ROCKRATH ET AL. AND SCIANGOLA REFERENCES WITH A REASONABLE EXPECTATION OF SUCCESS AS TO THE INVENTIONS OF APPLICANTS' CLAIMS 1-4, 6-15, AND 17-23.

The Sciangola reference relates to the use of a particular catalyst combination to cure two-component compositions used as adhesives, elastomers, and coatings. Applicants' claimed invention, on the other hand, relates to providing a rheological aid containing more than 10% of an already-formed urea derivative that is the reaction product of an isocyanate compound and an amine or water co-reactant with at least one organobismuth catalyst. Applicants' invention is directed to solving the problem of providing increased levels of urea derivative (>10%) in rheological aids so that coating compositions in order to avoid the necessity of high levels of rheological aids in the coating composition that undesirably lowers the coating composition's solids content (see application at page 3, line 7 – page 4, line 8). The Rockrath et al. reference is silent with regard to using *any* catalyst to catalyze the reaction of an isocyanate with an amine, but

the Office Action asserts that one skilled in the art would find it obvious to use the bismuth part of Sciangola's catalyst combination in a urea derivative as part of a rheological aid simply because it is a catalyst that is known catalyze the reaction of isocyanate and amine. Applicants respectfully disagree.

Applicants respectfully submit that the Office Action has not shown how or why one skilled in the art, faced with the problem of how to incorporate more than 10% of urea derivative into a rheological aid without experiencing the excessive thickening that limited prior art rheological aids to 10% urea derivative content, would be motivated with any reasonable expectation of success to use *any* catalyst, much less Applicants' claimed organobismuth catalyst, to catalyze the formation of the urea derivative. If anything, common sense would indicate that a catalyst would accelerate the reaction, leading to greater viscosity increases, not less. Such an analysis is in accordance with recent Federal Circuit holdings. "Our suggestion test is in actuality quite flexible and not only permits, but *requires*, consideration of common knowledge and common sense." *See, e.g., DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006). Even beyond common sense, however, the lack of any expectation of success is further bolstered by Sciangola's teaching at col. 1, lines 64-67 that bismuth catalysts lead to adverse increases in viscosity.

## II. THE COMBINATION OF ROCKRATH AND SCIANGOLA FAIL TO TEACH OR SUGGEST ALL OF THE REQUIRED LIMITATIONS OF APPLICANTS' INDEPENDENT CLAIMS 1-4, 6-15, AND 17-23.

Applicants submit that the combination of references fails to disclose Applicants' requirement that the rheological agent contain more than 10% by weight of the reaction product of (a1) and (a2). The Office Action asserts that Applicants' claim limitation requiring more than 10% urea derivative content is not patentably distinguishable from the 10% endpoint of the 0.1-10% range disclosed in the Rockrath et al. reference, and that in any case, Rockrath et al.'s disclosure that the urea content can "vary widely" constitutes a disclosure of more than 10% urea content. Applicants respectfully disagree. Applicants have diligently searched the Rockrath et al. reference, and can find no

instance of any disclosure of using more than 10% urea content in a rheological aid. As to Rockrath et al.'s statement that the urea content can vary widely, Applicants point out that anything could be said to 'vary widely', including a range of values within the disclosed 0.1-10% range, and that there is no disclosure in the Rockrath et al. reference that could be fairly said to disclose rheological aids with more than 10% urea derivative content, required by Applicants' claimed invention. Additionally, Applicants respectfully submit that the Office Action's analysis regarding a single molecule more than 10% urea derivative content is speculative, and they point out that MPEP § 2144.05 supports an argument for *prima facie* obviousness for non-overlapping ranges *only* when one skilled in the art would expect them to have the same performance. Applicants respectfully submit that the Office Action has not shown any expectation in the art of equivalent performance to refute the position set forth at page 3 of the application that 10% represents an outer limit of operability for prior art urea-containing rheological aids, against which "more than 10%" *would* be patentably distinguished. Applicants point out in this regard that the mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability that forces an applicant to prove conclusively that the Patent Office is wrong. *In re Soli*, 137 USPQ 797 (CCPA 1963).

For these reasons, Applicants respectfully submit that Applicants' required limitation of 'more than 10%' by weight should be given patentable weight in distinguishing from the proposed combination of references.

### III. THE COMBINATION OF ROCKRATH AND SCIANGOLA FAILS TO DISCLOSE OR SUGGEST EACH OF THE REQUIRED ELEMENTS OF APPLICANTS' CLAIMED INVENTION AS SET FORTH IN CLAIMS 30 AND 31.

The Rockrath et al. reference discloses rheology control agents comprising urea derivatives, but fails to disclose rheology control agents with a urea derivative content above 10% by weight as required by Applicants' claimed invention. However, the Office Action asserts that Applicants claim limitation of "more than 10%" reads on rheology

control agents that exceed the 10% limitation by a *de minimus* amount, which it asserts does not patentably distinguish from the disclosure of the reference. Applicants' claims 30 and 31, however, specify a urea derivative content of more than 14%, which is clearly not disclosed anywhere in the Rockrath et al. primary reference.

As disclosed in the present application at page 3, line 23 – page 4, line 20, prior art rheology control agents such as those disclosed by Rockrath et al. have been limited to a urea derivative content of 10% because higher contents are so thick (“barely fluid”) that they cannot be readily processed. The requirement of a urea derivative content of more than 14% in a rheological aid as set forth in Applicants' claims 30 and 31 is a full 40% higher than the prior art cap, and is clearly not disclosed in the Rockrath et al. primary reference. Moreover, the skilled artisan would not have expected that urea derivative contents of more than 14% in a rheological aid could be achieved through the use of a bismuth catalyst. To the contrary, the secondary Sciangola reference teaches at col. 1, lines 64-67 that bismuth catalyst-based resin systems are subject to rapid viscosity increases, which would tend to teach away from the invention of Applicants' claims 30 and 31 of using bismuth catalysts to overcome the viscosity-imposed 10% urea derivative content limitation found in the prior art. Accordingly, Applicants submit that their invention as claimed in claims 30-31 is patentable over the cited combination of references.

#### IV. THE COMBINATION OF ROCKRATH AND SCIANGOLA FAILS TO DISCLOSE OR SUGGEST EACH OF THE REQUIRED ELEMENTS OF APPLICANTS' CLAIMED INVENTION AS SET FORTH IN CLAIMS 29, 31 AND 32.

The primary Rockrath et al. reference discloses rheology control agents comprising urea derivatives, but fails to disclose bismuth-catalyzed urea derivatives (or *any* catalyzed urea derivatives, for that matter). The Sciangola reference discloses a *combination* of zirconia and bismuth catalysts for catalyzing the reaction of a polyisocyanate with active hydrogen-containing compounds. Therefore, although Applicants do not acknowledge the propriety of combining the references, such a

combination involving the substitution of Sciangola's catalyst system for the catalyst disclosed by Rockrath et al. would logically yield a rheological aid with a urea derivative catalyzed by a *combination of two catalysts – zirconia and bismuth*. Applicants' claim 29, on the other hand, specifies a catalyst *consisting of* an organobismuth catalyst. As this transition phrase is recognized to exclude any element not specified (see MPEP § 2111.03), Applicants submit that the inclusion of a zirconia catalyst as required by Sciangola would render the teaching of the combined reference outside the scope of the defined catalyst in claim 29.

Claims 31 and 32 specify that the urea derivative includes a catalyst *consisting essentially of* one or more organobismuth catalysts. The transition phrase "consisting essentially of" limits the scope of the claimed catalyst to the specified component and those that do not affect the basic and novel characteristics of the claimed invention (see MPEP § 2111.03). Applicants submit that Sciangola's teaching at col. 1, lines 64-67 that resin systems catalyzed by bismuth compounds without Sciangola's additional required zirconia compound are subject to rapid viscosity increases goes directly to the basic and novel characteristics of the claimed invention, which seeks to avoid the excessive thickening found in the prior art when urea derivative levels in rheological aids exceed 10%. Accordingly, Applicants submit that the inclusion of a zirconia catalyst as required by Sciangola would render the teaching of the combined reference outside the scope of the defined catalyst in claims 31-32. For these reasons, Applicants submit that their invention as claimed in claims 29 and 31-32 is patentable over the cited combination of references.

## CONCLUSION

Applicants respectfully submit that the Application and pending claims are patentable in view of the foregoing remarks. A Notice of Allowance is respectfully requested. As always, the Examiner is encouraged to contact the Undersigned by telephone if direct conversation would be helpful.

Respectfully Submitted,

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Tuesday, January 19, 2010  
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